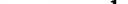## CLAIMS

1.   A method, including steps of

sending data between a client and a server at an address agreed by said client and said server;

wherein said steps of sending data are responsive to a request or a response between said client and said server; and

wherein said steps of sending data are asynchronous with regard to said request or said response.

2.   A method as in claim 1, wherein

said request or said response includes at least some control information; and

said steps of sending data are responsive to said control information.

3.   A method as in claim 1, wherein

said request or said response includes at least one memory address;

said steps of sending data are responsive to said memory address, wherein said data is read from or written to a memory in response to said memory address.

4.   A system including

a client and server;

1   a NUMA communication link coupled to said client and server;

2   a request from said client to server or a response from said server to client;

3   and

4   a data transfer between said client and server;

5   wherein said data transfer has a time that is decoupled from a time of said

6   request or response; and

7   wherein said data transfer has a location that is mutually agreed between

8   said client and server.

9

10   5.   A system, as in claim 4, also including a byte serial communication

11   link.

12   6.   A system as in claim 4, wherein

13   either said client or server performs processing of information in said data

14   transfer;

15   said processing is performed in an order convenient to both said client and

16   server; and

17   said order is decoupled from an order of said data transfer.

18

19   7.   A system as in claim 4, wherein said data transfer is responsive to

20   control information in said request or response.

21

1   8.   A system as in claim 4, wherein said data transfer is responsive to

2 said request or response.

3

4   9.   A system as in claim 4, wherein said data transfer uses said NUMA

5 communication link.

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7   10.   A system as in claim 4, wherein said mutually agreed location is

8 responsive to control information in said request or response.

9

10   11.   A system as in claim 4, wherein said request or response uses said

11 byte serial communication link.

12

13   12.   A system including

14   a server, said server having a memory including a client communication

15 region and a data transfer region;

16   a remote DMA communication link coupled to said data transfer region;

17   said client communication region including information regarding a data

18 transfer into or out of said data transfer region;

19   said data transfer being decoupled in time from said client request region.

20

21   13.   A system as in claim 12, including a byte serial communication link

22 coupled to said client communication region.

1   14.   A system as in claim 12, including a processing element in said

2   server coupled to said data transfer region, said processing element responsive to a

3   request from a client or a response to a client.

4

5   15.   A system as in claim 12, including a processing element in said

6   server coupled to said data transfer region, said processing element responsive to control

7   information in said client communication region.

8

9   16.   A system as in claim 12, including a processing element in said

10 server coupled to said data transfer region, said processing element using information in

11 said data transfer region independently of said remote DMA communication link.

12

13 17.   A system as in claim 12, including a request from a client or a

14 response to said client having information regarding a location within data transfer

15 region.

16

17 18.   A system as in claim 12, wherein said client communication region

18 stores a request from a client or a response to said client.

19

20 19.   A system as in claim 12, wherein said data transfer region stores a

21 data transfer to or from a client.

22

1   20.   A system as in claim 12, wherein said remote DMA communication

2 link includes a NUMA communication link.

3

4   21   A method including

5   communicating file system requests and responses between a client and a

6 file server;

7   sending data between said client and said file server using a memory access

8 operation at an address agreed by said client and said file server, wherein said address is

9 responsive to information in said requests or said responses.

10

11   22.   A method as in claim 21, wherein said memory access operation

12 includes a DMA operation.

13

14   23.   A method as in claim 21, wherein said memory access operation

15 includes a remote DMA operation.

16

17   24.   A method as in claim 21, wherein said client includes a database

18 server.

19

20   25.   A method including

21   communicating database requests and responses between a client and a

22 database server;

1   sending data between said client and said database server using a memory

2   access operation at an address agreed by said client and said database server, wherein

3   said address is responsive to information in said requests or said responses.

4

5   26.   A method including

6   communicating requests and responses between a client and a server;

7   sending data between said client and said server using a memory access

8   operation at an address agreed by said client and said server, wherein said address is

9   responsive to information in said requests or said responses.

10

11   27.   A method as in claim 26, including

12   receiving said data at one of said client or at said server in a first order; and

13   processing said data at said one device in a second order unrelated to said

14   first order.

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